

**Investigation Report
on Administration of Public Examinations
Executive Summary**

BACKGROUND

This direct investigation was initiated by the Ombudsman on 18 May 2001 in the wake of a spate of errors in the Hong Kong Certificate of Education Examinations (HKCEE) and the Hong Kong Advanced Level Examinations (HKALE) in 2001. It has been conducted with the full cooperation of the Hong Kong Examinations Authority (HKEA).

Ambit

2. The investigation examines the flaws in the 2001 examinations and, in such light, the adequacy of the current arrangements for the administration of the examinations and the areas for improvement.

Methodology

3. In the course of the investigation, the Office of The Ombudsman has:

- examined relevant papers of HKEA, including administrative guidelines, manuals and working files of persons participating in the preparation of the relevant question papers;
- interviewed 29 persons participating in preparing question papers and making administrative arrangements for the examinations; and

- met with senior officers of the HKEA Secretariat.

ADMINISTRATIVE FRAMEWORK

HKEA

4. HKCEE and HKALE are administered by HKEA, an independent organisation set up by statute. Practical arrangements for the conduct of the examinations are made by the HKEA Secretariat under the direction of its governing body, the HKEA Council.

Question paper development process

5. The process of developing question papers for the two examinations has the following characteristics:

- Questions for a paper are always set by more than one Setter
- Each paper is scrutinised by a Moderation Committee usually comprising university professors/lecturers, secondary school teachers, and Education Department officers. A HKEA Subject Officer serves the committee as its secretary.
- Every question in a paper is examined in the context of compliance with the syllabus, appropriate level of difficulty, suitability of length and clarity of presentation.

- Each paper is checked at least three times before it is printed (by the Moderation Committee, Subject Officer and Chief Examiner) and twice again after printing (by the Subject Officer and Chief Examiner).
- Papers involving calculations are worked through another time by Independent Assessors before printing.

Arrangements for Listening Tests

6. HKEA officers visit schools to test radio reception efficacy before they are included as listening test centres. In 2001, centres where more than 20 candidates had experienced difficulties in receiving the radio broadcast in the previous year were excluded.

FINDINGS

Flaws in the 2001 Examinations

7. The Office of The Ombudsman has investigated into flaws reported in the media and by HKEA, with the following findings:

- (a) Mistakes were found in eight question papers either during or after the examinations. In four cases, the work of candidates was affected and remedial measures (such as mark adjustment), had to be taken. In the other four cases, candidates' performance was not affected

(Annex A).

- (b) There were two incidents of flaws in the arrangements for listening test centres (Annex B).
- (c) In another 21 papers, minor errors (mostly relating to language or administrative details) were found after printing but before the examinations. They were corrected by "Special Notices" read out at the time of the examinations (Annex C).
- (d) Two other question papers contained a number of language errors and were reprinted shortly before the examinations.
- (e) In six cases reported in the media, no flaw with the administration of the examinations was found (Annex D).

Causes of Errors

8. The investigation has identified the following factors leading to errors:

- (a) *Inadequate vigilance.*

This was the main cause. Most of the mistakes in question papers were made initially by Subject Officers or Setters. Undetected in the moderation and proofreading processes, they finally found their way into the live question papers. In a case relating to an

unsuitable listening test centre, the HKEA staff member responsible had overlooked radio reception efficacy report for the centre.

(b) *Unclear role of proofreaders*

Instructions to proofreaders did not clearly spell out their duties and the proofreaders did not seek to clarify. Certain details in papers were left unchecked as a result.

(c) *Proofreading without due diligence*

Even where clear instructions were given regarding how question papers were to be checked, in some cases they were not observed.

(d) *Unclear instructions regarding originality of questions*

A new Setter used materials from an overseas examination paper in the belief that it was not improper to do so, as the HKEA guidelines were imprecise and did not state the relevant policy clearly.

(e) *Inflexible adherence to guidelines*

Guidelines were rigidly followed in one case where a listening test had shown signs of unsatisfactory radio reception efficacy in the previous year. Some HKEA staff member considered only the number of candidates affected, but not the fact that the centre was

small and the proportion of candidates affected was high.

Contributing Administrative Factors

9. The following factors, mainly relating to the administrative practices of HKEA, have also contributed to the errors:

(a) *Lack of open recruitment system*

Moderation Committee members were not recruited openly. They were nominated by HKEA committee members or Subject Officers, from among their acquaintances. Some accepted appointment solely out of goodwill with the nominators. They might not take the task sufficiently seriously or could not afford sufficient time and energy for the examinations work.

(b) *Lack of recognition and appreciation*

A strong sense of commitment is essential for Moderation Committee members to achieve a consistently high-quality and error-free result, but the enthusiasm of some members was dampened by lack of appreciation and recognition for their services.

(c) *Heavy workload*

Subject Officers had to shoulder other duties such as curriculum development and internal

management improvement projects. Some, particularly new recruits, were not able to pay as much attention as they should to preparing question papers.

(d) *Inadequate supervision*

As question-setting was a professional and highly secured task, HKEA management did not take proactive steps to supervise and guide individual Subject Officers.

(e) *Incomplete records*

The development processes of individual question papers were not fully documented for those involved to take reference, or for supervising officers to keep track of progress.

(f) *Insufficient training*

Some Subject Officers, especially new recruits, did not have sufficient training to enable them to perform their duties without falling prey to the many potential pitfalls in the demanding tasks of examinations administration. Non-permanent examinations personnel were not trained in question-setting principles and skills.

(g) *Outdated guidelines and manuals*

The guidelines and manuals issued to Subject Officers and non-permanent examinations

personnel were outdated in places or lacking in details.

REMEDIAL MEASURES AND INITIATIVES

10. HKEA took swift measures to minimise the effect on candidates once a flaw was detected. It has since also adopted the following improvement initiatives:

- Drawing up a code of practice on the question paper development system with special emphasis on the checking procedures;
- Introducing an audit system to ensure every step in the question paper development system is properly implemented; and
- Providing more formal training to Subject Officers.

CONCLUSIONS

11. On the basis of the investigation, The Ombudsman is satisfied that the systems for the preparation of question papers and the administration of the examinations are basically sound and effective. The flaws in 2001 have been caused not by defects in the systems but deficiencies in implementation, inadequate vigilance being the main cause.

12. All those involved in the administration of public examinations should always be alert to the vital importance of a fairly and reliably administered examinations system to

the individual candidate and the community. Any flaw - even one - would compromise the confidence and esteem that Hong Kong's examinations regime has acquired locally and overseas.

RECOMMENDATIONS

13. To strengthen the administration of examinations, The Ombudsman has made the following recommendations:

- (a) Duties should be clearly described for different examinations personnel;
- (b) Measures should be taken to ensure that all persons participating in administration of the examinations clearly understand their duties;
- (c) Guidance notes and instructions should be reviewed and updated to ensure the processes relating to the administration of the examinations are accurately and clearly conveyed;
- (d) Training, initial and refresher, should be provided to Subject Officers as well as non-permanent examinations personnel;
- (e) In assigning duties to Subject Officers, consideration should be given to their levels of experience and the specific requirements of different examination papers;
- (f) Supervisors should proactively check the work of subordinates, in particular new officers and

officers in new posts, and offer guidance and assistance where appropriate;

- (g) A system should be introduced for the proper recording of the key stages in the development of question papers;
- (h) The system for recruitment of non-permanent examinations personnel should be open and stand the test of public scrutiny;
- (i) Suitable recognition and appreciation should be given to non-permanent examinations personnel so as to motivate and maintain their commitment to service; and
- (j) For listening tests, HKEA should -
 - i. continue to explore better ways to conduct the tests; and
 - ii. explore the possibility of using other radio channels with better transmission efficacy.

FINAL REMARKS

14. The Ombudsman considers that the unfortunate experience in 2001 should help all those participating in the administration of the examinations to do better in future.

15. The Ombudsman also hopes that releasing the findings of this investigation allays the public concern about the

system and re-assures our community of the integrity of the local examinations regime.

Office of The Ombudsman

March 2002

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Annex A: Flaws in the 2001 Question Papers

Question Paper	Problem	Remedial Action
CE Physical Education	Wrong marks were indicated in a question	—
AL History	There was a discrepancy between the Chinese (1900-1945) and English (1919-45) versions of a question	Special instructions to markers
AL Pure Mathematics	“(6-x)” was wrongly put as “(x-6)”	Adjustment of marking scheme
AL Geography	A question was based on a reference book	—
CE English Writing	The words “END OF PAPER” were left out	—
AL Computer	The example given in a question contained a mistake	Adjustment of marking scheme
AS Computer	The paper contained a number of language mistakes	—
CE Chinese History	A multiple-choice question did not provide a correct answer	Adjustment of marking scheme

Annex B:**Flaws in Listening Test Arrangements**

Question Paper	Problem	Remedial Action
AL Use of English, Listening Test	88 of the 150 candidates taking the test at a centre, where 20 candidates experienced radio reception difficulties in the previous year, were adversely affected by poor transmission	Adjustment of marks for candidates affected
CE English Language, Listening Test	Listening test was held at a school previously found to be unsuitable	Arrangements were made on time for candidates to take the test in "special rooms" equipped with transistor radios to broadcast the examination materials

Annex C: Errors Corrected by “Special Notices”

No.	Question Paper	Correction
1	CE Chinese History Paper 2	In Question 31, the word “場” should be amended as “場”
2	CE Computer Studies Paper 1A	In Question 4, “as” should be deleted from “A sample output is shown as below”
3	CE Computer Studies Paper 2	In Question 19, “playing computer game” should be amended as “playing computer games”
4	ASL Engineering Science Paper 1 (Chinese version)	In Question 7(d), “電滋波” should be amended as “電磁波”
5	CE English Language (Syllabus A) Paper 4	In Question Paper version 9.2, “talk him/her” should be amended as “talk to him/her”
6	CE English Language (Syllabus B) Paper 4	In Question Paper version 12.1, “at (the) evening” should be amended to “in (the) evening”
7	CEE English Language (Syllabus B) Paper 4	In Question Paper version 17.1, “activies” should be amended as “activities”
8	CE Geography Paper 1	In Question 3, “sendiment” should be “sediment”
9	CE Geography 2 (Chinese version)	In the title of the map, “香中學會考” should be amended as “香港中學會考”
10	CE History Paper 1	In Question 4, “Billions of Dollars” should be amended as “Billions of US Dollars”
11	AL Chinese Language and Culture Paper 1A	In Question 4, “己” should be amended as “已”
12	AL Chinese Language and Culture Paper 1B	In Comprehension Passage 2, “研” should be amended as “研”
13	AL Chinese Literature Paper 1B	In the playscript provided, words attributed to “虞姬” should be attributed to “牛郎”
14	AL Computer Applications Paper 1	In Question 3, the punctuation mark 「」 should be included to enclose each of the four expressions 互聯網資源, 協定, 操作系統 and 其他
15	AL Computer Studies Paper 2	In Question 12(b), “CPMX” should be amended as “CMPX”
16	ASL Ethics and Religious Studies	In question 1, “上斷頭台” should be deleted from “卡登冒充情敵上斷頭台受死”
17	AL Liberal Studies (The Modern World)	On the front page, the time duration of the examination was wrongly written as “8.30 am – 11.00 am”. It should be “1.30 pm – 4 pm”
18	AL Liberal Studies (Science, Technology and Society)	On the front page, the time duration of the examination was wrongly written as “8.30 am – 11.00 am”. It should be “1.30 pm – 4 pm”
19	AL Liberal Studies (China Today), Chinese version	On the front page, the time duration of the examination was wrongly written as “上午八時三十分至上午十一時”. It should be “下午一時三十分至下午四時”

20	AL Music Paper 2	A revised version of page 1 of Question 1 had to be issued to candidates because some signs had not been provided in the original version.
21	AL Principles of Accounts Paper 2	The question on page 5 was not numbered. It should be numbered as Question 5

Annex D: Cases Not Involving Errors

Subject	Problem alleged	Findings
AL Chinese Language & Culture	Media reported about suspected leakage of questions	The Independent Commission Against Corruption investigated the case and found no evidence of malpractice
AL Physics, Practical Examination	Complaints about instruments failing to function	Sufficient guidance had been given to schools by HKEA about the setting up of instruments and conduct of the examination. Spare instruments were provided to cater for instrument failure
CE Putonghua Listening Test	Complaints about difficulties in receiving radio broadcast at a centre in Kowloon Tong	15 candidates complained about poor radio reception before the test started and were moved to the "special room" to take the test. They were not adversely affected. The centre had been previously checked for radio reception efficacy and the result was satisfactory
CE Mathematics	Air-conditioner was not turned on at a centre	The matter was reported in the press and HKEA received a complaint. The decision whether to turn on the air-conditioning was made by the supervisor at the centre. Other candidates at the same centre found the condition satisfactory
CE Chinese Language	Temporary power failure at a number of centres in Kowloon	The power failure was caused by problems at the power supplier's installation. HKEA had provided guidance notes to centre supervisors on how to handle such contingency, and centres took action accordingly. Candidates at centres seriously affected were given mark adjustments
CE Computer Studies	A letter published in the press suggested that a multiple-choice question did not include the correct answer	In fact, the correct answer was included